## a.) Amendment to the Claims

- 1. (Currently Amended) A method of treating restless legs syndrome, comprising administrating administering an effective amount of at least one adenosine  $A_{2A}$  receptor antagonist to a patient suffering from restless legs syndrome.
- (Currently Amended) The method of treating restless legs syndrome according to elaim 1 claim 1, wherein the adenosine A<sub>2A</sub> receptor antagonist is a xanthine derivative or a pharmaceutically acceptable salt thereof.
- (Currently Amended) The method of treating restless legs syndrome according to elaim 2 claim 2, wherein the xanthine derivative is represented by the following formula (I):

wherein R<sup>1</sup>, R<sup>2</sup>, and R<sup>3</sup> independently represent hydrogen, lower alkyl, lower alkenyl, or lower alkynyl; R<sup>4</sup> represents cycloalkyl, -(CH<sub>2</sub>)<sub>n</sub>-R<sup>5</sup> (in which R<sup>5</sup> represents substituted or

unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; and n is an integer of 0 to 4), or

 $\{\text{in which }Y^1 \text{ and }Y^2 \text{ independently represent hydrogen, halogen, or lower alkyl; and }Z$  represents substituted or unsubstituted aryl, or

(in which  $R^6$  represents hydrogen, hydroxy, lower alkyl, lower alkoxy, halogen, nitro or amino; and m represents an integer of 1 to 3)}; and  $X^1$  and  $X^2$  independently represent O or  $S_7$  or S

## or a pharmaceutically acceptable salt thereof.

 (Currently Amended) The method of treating restless legs syndrome according to elaim 2 claim 2, wherein the xanthine derivative is represented by the following formula (I-A):

$$\mathbb{R}^{1a}$$
  $\mathbb{R}^{2a}$   $\mathbb{R}^{2a}$   $\mathbb{R}^{2a}$   $\mathbb{R}^{2a}$   $\mathbb{R}^{2a}$   $\mathbb{R}^{2a}$   $\mathbb{R}^{2a}$   $\mathbb{R}^{2a}$   $\mathbb{R}^{2a}$ 

wherein  $R^{1a}$  and  $R^{2a}$  independently represent methyl or ethyl;  $R^{3a}$  represents hydrogen or lower alkyl; and  $Z^a$  represents

(in which at least one of  $R^7$ ,  $R^8$  and  $R^9$  represents lower alkyl or lower alkoxy and the others represent hydrogen;  $R^{10}$  represents hydrogen or lower alkyl) or

(in which  $R^6$  represents hydrogen, hydroxy, lower alkyl, lower alkoxy, halogen, nitro or amino; and m represents an integer of  $\frac{1+to 3}{1}$ ,  $\frac{1}{1}$  to  $\frac{3}{1}$ 

or a pharmaceutically acceptable salt thereof.

 (Currently Amended) The method of treating restless legs syndrome according to elaim 2 claim 2, wherein the xanthine derivative is (E)-8-(3,4dimethoxystyryl)-1,3-diethyl-7-methylxanthine.

Claims 6 and 7 (Cancelled).

- $8. \qquad \text{(Currently Amended)} \qquad \text{A method of treating nocturnal myoclonus,} \\ \text{comprising administrating administering} \text{ an effective amount of at least one adenosine } A_{2A} \\ \text{receptor antagonist to a patient suffering from nocturnal myoclonus.}$
- 9. (Previously Presented) The method of treating nocturnal myoclonus according to claim 8, wherein the adenosine  $A_{2A}$  receptor antagonist is a xanthine derivative or a pharmaceutically acceptable salt thereof.
- (Currently Amended) The method of treating nocturnal myoclonus according to claim 9, wherein the xanthine derivative is represented by the following formula (I):

$$X^{2}$$

$$X^{1}$$

$$X^{2}$$

$$X^{1}$$

$$X^{2}$$

$$X^{3}$$

$$X^{4}$$

$$X^{2}$$

$$X^{2}$$

$$X^{3}$$

$$X^{4}$$

$$X^{2}$$

$$X^{4}$$

wherein  $R^1$ ,  $R^2$ , and  $R^3$  independently represent hydrogen, lower alkyl, lower alkenyl, or lower alkynyl;  $R^4$  represents cycloalkyl, -(CH<sub>2</sub>)<sub>n</sub>- $R^5$  (in which  $R^5$  represents substituted or unsubstituted aryl, or a substituted or unsubstituted heterocyclic group; and n is an integer of 0 to 4), or

(I)

 $\{\text{in which }Y^1\text{ and }Y^2\text{ independently represent hydrogen, halogen, or lower alkyl; and }Z$  represents substituted or unsubstituted aryl, or

(in which  $R^6$  represents hydrogen, hydroxy, lower alkyl, lower alkoxy, halogen, nitro or amino; and m represents an integer of 1 to 3)}; and  $X^1$  and  $X^2$  independently represent O or  $S_7$  or S

## or a pharmaceutically acceptable salt thereof.

11. (Currently Amended) The method of treating nocturnal myoclonus according to claim 9, wherein the xanthine derivative is represented by the following formula (I-A):

wherein  $R^{1a}$  and  $R^{2a}$  independently represent methyl or ethyl;  $R^{3a}$  represents hydrogen or lower alkyl; and  $Z^a$  represents

(in which at least one of  $R^7$ ,  $R^8$  and  $R^9$  represents lower alkyl or lower alkoxy and the others represent hydrogen;  $R^{10}$  represents hydrogen or lower alkyl) or

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(in which R<sup>6</sup> represents hydrogen, hydroxy, lower alkyl, lower alkoxy, halogen, nitro or amino; and m represents an integer of  $\frac{1 + to 3}{1}$ ,  $\frac{1}{1}$  to  $\frac{3}{1}$ 

or a pharmaceutically acceptable salt thereof.

12. (Previously Presented) The method of treating nocturnal myoclonus according to claim 9, wherein the xanthine derivative is (E)-8-(3,4-dimethoxystyryl)-1,3-diethyl-7-methylxanthine.